UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

In Re: Methyl Tertiary Butyl Ether ("MTBE") Products Liability Litigation

This document relates to:

Commonwealth of Puerto Rico, et al. v. Shell Oil Co., et al., Case No. 07-cv-10470

Master File No. 1:00-1898 (SAS) MDL 1358

PLAINTIFF'S CONSOLIDATED RULE 56.1 STATEMENT IN OPPOSITION TO DEFENDANT CHEVRON PUERTO RICO, LLC'S RULE 56.1 STATEMENT IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT REGARDING NO INJURY AT TEXACO #800 AND PLAINTIFF'S 56.1 STATEMENT IN SUPPORT OF ITS OPPOSITION TO CHEVRON'S MOTION FOR SUMMARY JUDGMENT

Pursuant to Rule 56.1 of this Court's Civil Rules, plaintiff respectfully submits the following response to defendants' Rule 56.1 Statement Motion for Summary Judgment.

DEFENDANTS' PROPOSED	PLAINTIFF'S RESPONSE AND
UNDISPUTED MATERIAL FACTS AND	SUPPORTING EVIDENCE
ALLEGED SUPPORTING EVIDENCE	
1. Class SG-1 Groundwater is defined as	Disputed.
"ground waters intended for use as source of	
drinking water supply and agricultural uses	The Commonwealth of Puerto Rico has
including irrigation, along with ground waters	eliminated the distinction between Class SG-1
that flow into coastal, surface, and estuarine	and Class SG-2 ground waters, and now
waters and wetlands." Class SD Surface Water	classifies all ground waters as "Class SG."
is defined as "surface waters intended for use	Decl. of Wanda Garcia Hernandez, ¶ 5
as a raw source of public water supply,	(hereinafter Garcia Decl. ¶ _ "). That
propagation and preservation of desirable	"classification includes all ground waters as
species, including threatened or endangered	defined in this Regulation." (Id.) "Ground
species, as well as primary and secondary	Waters" are defined in the Regulation, in
contact recreation." Jeremiah J. Anderson	pertinent part, as all "sub-surface waters
Decl. ("Anderson Decl.") Ex. 1, at pp. 37-40	present at or beneath the water table." (Id.)
(Puerto Rico Environmental Quality Board	
Water Quality Standards Regulations).	

Texaco #800 Remediation

DEFENDANTS' UNDISPUTED MATERIAL FACTS AND ALLEGED SUPPORTING EVIDENCE	PLAINTIFF'S RESPONSE AND EVIDENCE
2. MTBE soil impacts were first reported at Texaco #800 in April 2006 when soil samples were collected as part of the removal and replacement of two USTs. Anderson Decl. Ex. 3, at p. 109 (Brown Revised Expert Report dated April 28, 2014).	Disputed. Soil samples were not analyzed or reported for MTBE (or TBA) in 2006. Decl. of Michael Axline, Ex. 3 (Brown Report (April 2014), pp. 109, 112) (hereinafter "Axline Decl., Ex").
3. Groundwater MTBE impacts were initially reported in October 2009. Anderson Decl. Ex. 3, at p. 109 (Brown Revised Expert Report dated April 28, 2014).	Undisputed. Axline Decl., Ex. 3 (Brown Report (April 2014), p. 112). Plaintiff's 56.1 Separate Statement, Fact No. 28 (hereinafter "Plaintiff's Fact No").

4. Since 2009, CPRLLC has employed, and continues to employ, active remediation technologies to address the MTBE remaining at the site under the oversight of the Puerto Rico Environmental Quality Board. Anderson Decl. Ex. 3, at pp. 109, 116-17 (Brown Revised Expert Report, dated April 28, 2014); Anderson Decl. Ex. 4, at p. 1 (Brown Addendum to Revised Expert Report dated May 20, 2014).

Disputed.

"Active remediation" commenced at Texaco #800 (the "Site") in the fall of 2013. Axline Decl., Ex. 7 (Expert Opinion of John A. Connor, P.A., P.E., and BCEE, and Anthony D. Daus III, P.G., Concerning MTBE in Groundwater in the Vicinity of the Former Texaco 800 Service Station in Ponce, Puerto Rico, p. 38) (hereinafter "Connor-Daus Report (April 2014)).

Remediation performed to date has not effectively addressed on-Site or off-Site MTBE or TBA groundwater contamination. Axline Decl., Ex. 3 (Brown Report (April, 2014), p. 135; Axline Decl., Ex. 5 (ERTEC Corrective Action Plan, May 2013, p. CHEVMDL1358-00000122118 [Chevron cleanup consultant expected only 60-90% reductions after work in 2013, but targets were not reached at some wells, a 96.4% increase at one well, and a 1,1226% increase at another]); see Axline Decl., Ex. 7 (Connor-Daus Report (April 2014), Tbl. C.3); Brown Decl., ¶¶ 5-8.; Axline Decl., Ex. 12 (De La Rosa Depo., September 13, 2013, Ex. 2, pp. 9-11).

Plaintiff's Fact No. 26-40.

Anthony Brown's Opinions

DEFENDANTS' UNDISPUTED MATERIAL FACTS AND ALLEGED SUPPORTING EVIDENCE

5. Plaintiffs retained Anthony Brown as an expert to "develop a conceptual site model (CSM) that considers contaminant sources, pathways, and receptors" associated with the Texaco #800 site. Anderson Decl. Ex. 3, at p. 2 (Brown Revised Expert Report dated April 28, 2014).

PLAINTIFFS' RESPONSE AND EVIDENCE

Disputed.

Mr. Brown was retained to perform several tasks in addition to preparing a conceptual site model. Axline Decl., Ex. 3 (Brown Report (April 2014), § 1.2). Brown also conducted modeling to help "determine capture zones for the water supply wells." Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 169:3-5).

6. Brown concedes that there are no Class SD surface waters that have been or could be impacted by MTBE from Texaco #800. Anderson Decl. Ex. 5, at p. 122 (Brown Depo.).	Undisputed.
7. Brown identifies eight water wells as "receptors" in the vicinity of Texaco #800. Anderson Decl. Ex. 3, at p. 130 (Brown Revised Expert Report dated April 28, 2014).	In the Brown Report (April 2014), Mr. Brown identified three public water supply wells, one domestic water supply well, three irrigation water supply wells, and an industrial supply well potentially impacted by the releases from Texaco #800. Axline Decl. Ex. 3 (Brown Report (April 2014), p. 111). Mr. Brown subsequently identified eight public water supply wells (two not in use), four domestic water supply wells, eight irrigation water supply wells, three institutional water supply wells, and three industrial water supply wells potentially impacted by the releases from Texaco #800. Brown Decl., ¶ 17. Plaintiff's Fact No. 53-54.
8. MTBE and TBA have not been detected in any well that Plaintiffs associate with Texaco #800. Anderson Decl. Ex. 5, at p. 124 (Brown Depo.); Ex. 3, at p. 130 (Brown Revised Expert Report dated April 28, 2014).	Disputed. MTBE has been detected in multiple monitoring wells associated with Texaco #800 at concentrations including 14,500 ug/l in a groundwater sample collected from MW-102, and 15,500 ug/l in a groundwater sample collected from MW-103, on September 8, 2010. TBA has been detected at depth-discrete sampling locations GP-2 and GP-3 near the Site. Axline Decl., Ex. 3 (Brown Report (April 2014), Tbl. 5.1; Axline Decl., Ex. 7 (Connor-Daus Report (April 2014), Tbl. C.2). Recent detections of MTBE are still extremely high at 10,000 ug/l in MW-103. (Id.) Public water supply wells draw drinking and

	irrigation water from the aquifer (the South Coast Aquifer) contaminated by Texaco #800. Garcia Decl., ¶¶ 7-12; see Brown Decl., ¶¶ 11 ("[T]he contaminated groundwater is hydraulically connected to deeper groundwater, and it is part of one aquifer system – the South Coast Aquifer."). Plaintiff's Fact No. 26-40.
9. MTBE from Texaco #800 has never been detected in the shallow groundwater more than forty-eight feet below ground surface. Anderson Decl. Ex. 4, at Table 5.1 (Brown Addendum to Revised Expert Report dated May 20, 2014).	Disputed. MTBE from Texaco #800 has been detected at forty-nine feet below ground surface. Axline Decl., Ex. 8 (SUN_PUERTO_ZEEB 001236); Brown Decl., ¶ 8. San Anton North, which draws irrigation water from 41 feet bgs and perhaps shallower, is closer to Texaco #800 than borings B-7 and B-1, at which MTBE has been detected in groundwater at 45 and 49 feet bgs respectively. Brown Decl., ¶ 11.2. No deeper samples have been collected in the area of the Site. (<i>Id.</i>)
10. For MTBE from Texaco #800 to impact the South Coast Aquifer, there must be "some form of vertical communication between the contaminated shallow zone and the deeper zone." Anderson Decl. Ex. 5, at pp. 127-28 (Brown Depo.). Brown also testified that "no data has been collected to confirm that the contamination is present in that deeper groundwater." <i>Id</i> .	Disputed. The shallow groundwater contaminated by Texaco #800 is part of the South Coast Aquifer. Garcia Decl., ¶¶ 7-12; Brown Decl., ¶¶ 11. Mr. Brown testified that "some form of vertical communication" would be needed for MTBE from Texaco #800 to get to "deeper groundwater," not to the South Coast Aquifer. Anderson Decl., Ex. 5 (Brown Depo., May 22, 2014, pp. 127:16-129:16). Mr. Brown further testified that the San Anton North well may capture the MTBE from Texaco #800 before it reaches deeper groundwater. (<i>Id.</i> ; see also Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, pp. 172:2-19, 190:20-191:6).) There is vertical communication within the

	South Coast Aquifer according to Mr. Brown, Ms. Garcia, and the U.S. Geological Survey ("USGS"). Garcia Decl., ¶¶ 7-12; Brown Decl., ¶¶ 11; see Axline Decl. Ex. 3 (Brown Report (April 2014), p. 132 ["No distinct aquitard is present between the Site alluvial sediments and the South Coast Aquifer. Groundwater in the sediments beneath the Site is likely in communication with the South Coast Aquifer."]).
11. Brown's model purports to show that MTBE from Texaco #800 has impacted one public water supply well—Beljica—and one irrigation well—San Anton North. Anderson Decl. Ex. 5, at p. 125 (Brown Depo.).	Disputed. The modeling in the Brown Report (April 2014) shows one water supply well (Belgica) has a capture zone extending <i>beneath</i> the known area of contamination (as defined by Chevron's limited and incomplete sampling) and another (San Anton North) has a capture zone extending <i>into</i> the known area of contamination. Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, pp. 172:2-19, 190:20-191:6).
	Subsequent modeling by Mr. Brown based on new information from defense experts John Connor and Anthony Daus affirmed that San Anton North has a capture zone extending <i>into</i> the known area of contamination and shows that, if Belgica does not exist or is not pumping, the capture zone of the Costa Caribe public drinking water supply well extends into the known area of contamination. Brown Decl., ¶ 17; Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, pp. 156:7-157:9). Plaintiff's Fact No. 50-54.
12. Brown asserts that "[t]he simulated capture	Disputed.
zones for the other water supply wells [that Brown associates with Texaco #800] do not extend beneath the known area of contamination." Anderson Decl. Ex. 3, at p. 132 (Brown Revised Expert Report dated April 28, 2014); Anderson Decl. Ex. 5, at p. 125	"I've not [] excluded other wells as still being potentially threatened." Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 191:4-6). Brown testified that "if the San Anton well

(Brown Depo.).

wasn't pumping, then that groundwater would flow to another well." Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 191:23-25). That point was reiterated a few answers later: "[G]iven the scenario or the situation at the site, there will be a capture zone of a well that extends beneath the area of contamination given the pumping in the area. It's just a matter of which well would that be if the San Anton well was not pumping." Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 193:7-13).

Plaintiff's Fact No. 50-54.

13. Brown claims that MTBE from Texaco #800 has impacted SG-1 Groundwater in the South Coast Aquifer through alleged well-bore leakage at the San Anton North well due to the lack of a sanitary seal. Brown's "model" suggests that MTBE from Texaco #800 has been captured by the San Anton North well and has reached the South Coast Aquifer as a result of well-bore leakage. His "model" then suggests that the MTBE leaked into the South Coast Aquifer is drawn to the Beljica public water supply well. Anderson Decl. Ex. 3, at p. 32 (Brown Revised Expert Report dated April 28, 2014).

Disputed.

The shallow groundwater contaminated by Texaco #800 is part of the South Coast Aquifer. Garcia Decl., ¶¶ 7-12; Brown Decl., ¶11. Mr. Brown testified that "some form of vertical communication" would be needed for MTBE from Texaco #800 to get to "deeper groundwater," not to the South Coast Aquifer. Anderson Decl., Ex. 5 (Brown Depo., May 22, 2014, pp. 127:16-129:16). Mr. Brown further testified that the San Anton North well may capture the MTBE from Texaco #800 before it reaches deeper groundwater. (Id.; see also Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, pp. 172:2-19, 190:20-191:6).

Mr. Brown, Ms. Garcia, and the U.S. Geological Survey ("USGS") all agree there is vertical communication within the South Coast Aquifer. Garcia Decl., ¶¶ 7-12; Brown Decl., ¶¶ 11, 11.1; see Axline Decl. Ex. 3 (Brown Report (April 2014), p. 132 ["No distinct aquitard is present between the Site alluvial sediments and the South Coast Aquifer. Groundwater in the sediments beneath the Site is likely in communication with the South Coast Aquifer."]).

Mr. Brown's discussion of the effect of wellbore leakage is as a phenomenon in addition to

	the basic water flow patterns and hydrogeology in the area of Texaco #800. Axline Decl., Ex. 3 (Brown Report (April 2014), pp. 131-132); Brown Decl., ¶¶ 14, 14.1, 14.2. Plaintiff's Fact No. 46.
14. Brown admits that "the condition of the	Undisputed.
sanitary seal, if present, at these wells is unknown." Anderson Decl. Ex. 3, at p. 129 (Brown Revised Expert Report dated April 28, 2014).	Brown Decl., ¶ 14.3.

Beljica Well

DEFENDANTS' UNDISPUTED MATERIAL FACTS AND ALLEGED SUPPORTING EVIDENCE	PLAINTIFFS' RESPONSE AND EVIDENCE
15. The Beljica well has never been located. Anderson Decl. Ex. 5, at pp. 139-40, 146-47 (Brown Depo.).	Disputed. The Belgica well is listed as a public water supply well in two government databases. The USGS database locates the well at Northing: 18.003605 and Easting: 66.607895. The Puerto Rico Department of Health ("PRDOH") database locates the well at Northing: 18.004133 and Easting: 66.599895. The USGS database coordinates place the Belgica well approximately 2,500 feet southwest of the Site. The PRDOH database coordinates place
	the well approximately 1,000 feet southsoutheast of the Site, which is the location at which Mr. Brown initially modeled the well. Brown Decl., ¶¶ 13, 13.1. Mr. Brown clarified the evidence supporting the Belgica well as modeled: "MR. CORRELL: So based upon your experience and expertise, it would be improper to model
,	this well because it can't be located, and there's no records to justify pumping rates; correct? MR. MASSEY: Objection. Compound, argumentative. THE WITNESS: No, that would not be correct. We understood based on the information we had that there was a public

	supply well at that location. Therefore, that is why we modeled it as such. We didn't have any indication that there was no such water supply well." Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 140:8-22.)
16. The alleged location of the Beljica well is near a baseball field, where the closest water feature is a water faucet connected to the neighborhood water system. Anderson Decl. Ex. 5, at p. 144 (Brown Depo.).	Disputed. The Belgica well is listed as a public water supply well in two government databases. The USGS database locates the well at Northing: 18.003605 and Easting: 66.607895. The PRDOH database locates the well at Northing: 18.004133 and Easting: 66.599895. The USGS database coordinates place the Belgica well approximately 2,500 feet southwest of the Site. The PRDOH database coordinates place the well approximately 1,000 feet southsoutheast of the Site, which is the location at which Mr. Brown initially modeled the well. Brown Decl., ¶¶ 13, 13.1. The PRDOH location is in the vicinity of a
	sports field. (Anderson Decl., Ex. 6 (Brown Depo., May 22, 2014, p. 144:17-23). The water faucet at that sports field is not evidence that the well is not in that location.
17. Plaintiffs now admit that the Beljica well does not exist. Anderson Decl. Ex. 6, p. 18 at RFA #29 (Pls.' July 28, 2014 Resp. to Chevron Defs.' RFA).	Disputed. Plaintiff made no such admission: "Plaintiffs object that there is no well named 'Beljica,' and believes this to be a misspelling by CRI of the known well's true name, 'Belgica.' Subject to and without waiving this and the general objections, plaintiffs, after diligent investigation and review of documents, are unable to admit or deny this matter." Anderson Decl., Ex. 6, p. 18.

San Anton North Well

DEFENDANTS' UNDISPUTED	PLAINTIFFS' RESPONSE AND
MATERIAL FACTS AND ALLEGED	EVIDENCE

SUPPORTING EVIDENCE

18. The San Anton North well has never been located. No witness has testified that this alleged irrigation well exists or can locate it on a map (Anderson Decl. ¶ 3), and Brown could not find the well when he visited the Texaco #800 site. Anderson Decl. Ex. 5, at pp. 147, 150-53 (Brown Depo.).

Disputed.

San Anton North is a documented active irrigation well according to both the USGS and defense expert Dr. Peter Zeeb (Sun_Puerto_Zeeb 019189). According to USGS and Dr. Zeeb, the well is in service and withdrawing groundwater. Brown Decl., ¶¶ 12, 12.1; Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 147:13-16); Axline Decl., Ex. 8 (Sun_Puerto_Zeeb 0191189 [indicating Site Use is "WITHDRAWAL" and Well Status is "In Service"]).

Plaintiff's Fact No. 43-45.

19. CPRLLC's expert Anthony Daus also could not locate the San Anton North well. Anderson Decl. Ex. 7, at p. 170 (Daus Depo.).

Disputed.

Mr. Daus merely spent "an hour" looking for two wells. Anderson Decl. Ex. 7, at 170. Mr. Daus and Mr. Connor identified details of the well in their report, including the depth of the well. Axline Decl., Ex. 7 (Connor-Daus Report (April 2014), Tbl. 5).

20. Brown produced a photograph of a manhole cover in the street near Texaco #800 as "evidence" of the San Anton North well's existence, but at his deposition Brown admitted that this did not appear to be a well to him. Anderson Decl. Ex. 5, at pp. 150-52 (Brown Depo.).

Disputed.

Mr. Brown testified that, while the manhole cover does not appear to be a public water supply well, it may be a domestic or irrigation well. Axline Decl. Ex. 1 (Brown Depo., May 22, 2014, pp. 151:23-152:4).

San Anton North is a documented active irrigation well according to both the USGS and defense expert Dr. Peter Zeeb (Sun_Puerto_Zeeb 019189). According to USGS and Dr. Zeeb, the well is in service and withdrawing groundwater. Brown Decl., ¶¶ 12, 12.1; Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 147:13-16); Axline Decl., Ex. 8 (Sun_Puerto_Zeeb 0191189 [indicating Site Use is "WITHDRAWAL" and Well Status is "In Service"]). Mr. Daus and Mr. Connor identified details of the well in their report,

	including its depth. Axline Decl., Ex. 7 (Connor-Daus Report (April 2014), Tbl. 5).
21. There is no evidence of current pumping rate information, pumping capacity information, owner or customer information, or well construction information for the San Anton North well. Anderson Decl. Ex. 5, at pp. 150, 152-153, 238-239 (Brown Depo.).	Disputed. Mr. Daus and Mr. Connor identified well construction details, including the depth of the well, from information in an additional database (maintained by the National Water Quality Monitoring Council) listing the well. Axline Decl., Ex. 7 (Connor-Daus Report (April 2014), Tbl. 5); Anderson Decl., Ex. 9; Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, pp. 156:18-157:9). San Anton North is a documented active irrigation well according to both the USGS and defense expert Dr. Peter Zeeb (Sun_Puerto_Zeeb 019189). According to USGS and Dr. Zeeb, the well is in service and withdrawing groundwater. Brown Decl., ¶¶ 12, 12.1; Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 147:13-16); Axline Decl., Ex. 8 (Sun_Puerto_Zeeb 0191189 [indicating Site Use is "WITHDRAWAL" and Well Status is "In Service"].). Plaintiff's Fact No. 43-45.
22. Brown assumed in his initial report that the San Anton North well was 100 feet southwest of the Texaco #800. Anderson Decl. Ex. 2, at p. 132 (Brown Expert Report dated Jan. 24, 2014). 23. In his revised report, he assumed that the well was 100 feet south-southeast of the	Disputed. Mr. Brown located the well according to the coordinates provided in the USGS database. Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 147:13-16); Axline Decl., Ex. 2 (Expert Report of Anthony Brown (January 2014), Fig. 5.3). Disputed.
station. Anderson Decl. Ex. 3, at p. 132 (Brown Revised Expert Report dated April 28, 2014).	Mr. Brown located the well according to the coordinates provided in the USGS database. Anderson Decl. Ex. 3 (Brown Report (April 2014), p. 132); Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 147:13-16).
24. The USGS National Water Quality Monitoring Council database reflects that the	Undisputed.

San Anton North well was constructed in 1916. Anderson Decl. Ex. 9 (Excerpt from USGS National Water Quality Monitoring Council, Water Quality Data).	
25. The last update to USGS information regarding the San Anton North well was made in 1958. Anderson Decl. Ex. 8 (Excerpt from United States Geological Survey, National Water Information System Inventory).	Undisputed.

PLAINTIFF'S 56.1 SEPARATE STATEMENT IN SUPPORT OF ITS OPPOSITION TO CHEVRON'S MOTION FOR SUMMARY JUDGMENT

- 26. MTBE from Texaco #800 has contaminated Class SG (formerly Class SG-1) groundwater. Garcia Decl., ¶¶ 5, 7-12; Brown Decl., ¶¶ 11, 11.1, 11.2.
- 27. MTBE was detected in soil at Texaco #800 in October 2009. Axline Decl. Ex. 3 (Brown Report (April 2014), p. 113,).
- 28. MTBE was detected in groundwater at Texaco #800 in October 2009. Axline Decl. Ex. 3 (Brown Report (April 2014), p. 113 & Tbl. 5.1).
- 29. Chevron knew in November 2010 that "[g]roundwater impacts are the focus of interest at the Site." Axline Decl., Ex. 5 (ERTEC, Remedial Investigation Texaco Service Station 800 Ponce, Puerto Rico, Nov. 30, 2010, p. CHEVMDL1358_PR 00000080559).
- 30. Chevron knew in November 2010 that MTBE from Texaco #800 had "possibly" migrated off-Site. Axline Decl. Ex. 5 (Letter from Jose Agrelot, ERTEC, to Yamira Rivera, Chevron, Nov. 30, 2010, p. CHEVMDL1358_PR 00000081603 ["Based on groundwater analytical results, it appears that a plume of gasoline constituents has migrated toward west, north and east from the center of the Site, and possibly off site in those directions."]).
- 31. Chevron was advised in November 2010 to revise its Site Strategic Plan to shift from investigation to "preparation of a Remedial Plan including the design of the remedial alternative." Axline Decl. Ex. 5 (Letter from Jose Agrelot, ERTEC, to Yamira Rivera, Chevron, Nov. 30, 2010, p. CHEVMDL1358 PR 00000081603).

- 32. Chevron knew in November 2011 that "MTBE concentrations currently exceed USEPA MCLs or EQB clean-up criteria" Axline Decl., Ex. 5 (ERTEC, Remedial Report, December 21, 2011, pp. PR-MTBE_427709-427710). ERTEC cited the MTBE in monitoring wells MW-101, MW-102, MW-103, MW-104, MW-202, and MW-203, with increases in five of the six wells, including a 509% increase in MW-101. (*Id.*)
- 33. Chevron was advised to begin remediation in November 2011. Axline Decl., Ex. 5 (ERTEC, Corrective Action Plan, November 28, 2011, p. PR-MTBE_412973 ["Based on the analytical groundwater and soil data, distribution or petroleum hydrocarbons in the subsoil and groundwater, and the hyrdo-geological characteristics of the groundwater below the Site, ERTEC recommends the application of in-situ chemical oxidation to treat the soil and groundwater and the use of a slow-release oxygen compound to stimulate aerobic biodegradation to treat the residual hydrocarbon within the delineated plume."]).
- 34. Chevron did not begin active remediation until the fall of 2013. Axline Decl., Ex. 7 (Connor-Daus Report (April 2014), p. 38). Chevron has not begun any remediation to address off-Site MTBE contamination from Texaco #800. Axline Decl., Ex. 3 (Brown Report (April 2014), p. 126).
- 35. Chevron did not collect off-Site groundwater samples until this year 2014. Axline Depo. Ex. 1 (Brown Depo., May 22, 2014, p. 212:10-23 ["The first monitoring wells were installed in -- excuse me. Were installed at the site in 2009. The first off-site samples for groundwater were collected by consultants working on behalf of Texaco in January of 2014, almost five years later. During that period, consultants working on behalf of Texaco collected no off-site data. As I sit here, I cannot think of any reason why they would not collect such data given the observed contamination unless perhaps they just weren't willing to do so."]).
- 36. The limited, on-Site remedial efforts at Texaco #800 have failed to clean up the MTBE groundwater contamination: "[O]f concern is that [Chevron] may have mobilized residual sorbphase or even NAPL-phase contamination such that the contaminant mass within groundwater may have actually increased slightly. This is one of the effects of particularly the surfactant element of the remediation program." Axline Depo. Ex. 1 (Brown Depo., May 22, 2014, pp. 224:23-225:2-12.]; see Axline Decl., Ex. 7 (Connor-Daus Report (April 2014), Tbl. C.3 [showing high MTBE concentrations]); Axline Decl., Ex. 3 (Brown Report (April 2014), p. 135); Brown Decl., ¶ 5-8.
- 37. Groundwater beneath and in the vicinity of Texaco #800 is contaminated with MTBE at the maximum depths sampled, including 39 feet (GP3), 45 feet (B-7), and 49 feet (B-1) bgs. Axline Decl., Ex. 10 (Addendum to Revised Expert Report, May 19, 2014, p.13 & Tbl. 5.1);

Anderson Decl., Ex. 4 (*id.* at Tbl. 5.1); Brown Decl., \P 8, 11.2; Axline Decl., Ex. 8 (SUN PUERTO ZEEB 001236).

- 38. MTBE continues to be present in groundwater beneath Texaco #800 at levels that include 10,000 ug/l. Axline Decl. Ex. 3 (Brown Report (April 2014), p. 123 & Tbl. 5.1). Because Chevron placed "ORC socks" on monitoring wells MW-102, MW-103, MW-104, MW-202, MW-203, and MW-204 in 2011, those wells no longer give representative samples of the groundwater in the vicinity of Texaco #800. Axline Decl., Ex. 3 (Brown Report (April 2014), p. 125). Samples obtained from these wells after the placement of ORC socks *understates* the concentrations of MTBE in groundwater in the vicinity of Texaco #800 because the chemical reaction in the ORC socks decreases the concentrations in the sampled water. Brown Decl., ¶ 6.
- 39. Chevron believes the high concentrations in MW-103 mean that "free product" (i.e., pure gasoline) is floating on the water table at Texaco #800. Axline Decl., Ex. 12 (De La Rosa Depo., September 12, 2013, p. 147:15-21).
- 40. Chevron has not delineated the extent of the MTBE contamination from Texaco #800 either vertically or horizontally. Axline Decl., Ex. 3 (Brown Report (April 2014), § 5.4.2.3).
- 41. The groundwater flow direction at Texaco #800 is generally to the southeast. Axline Decl., Ex. 5 (Letter from Jose Agrelot, ERTEC, to Yamira Rivera, Chevron, Nov. 30, 2010, p. CHEVMDL1358_PR 00000081602).
- 42. "Given the fate and transport properties of MTBE and TBA, these contaminants will migrate in groundwater with little attenuation. Therefore, in the absence of contaminant plume delineation, it should be assumed that MTBE and TBA contamination will be present a considerable distance down-gradient, may be present in deeper aquifers, and will persist for a long period of time. In the absence of remediation, the migration of contamination in groundwater will continue unabated. Therefore, the contamination poses a threat to nearby water supply wells." Axline Decl., Ex. 3 (Brown Report (April 2014), p.133).
- 43. The USGS lists the San Anton North water supply well in its database. Brown Decl., ¶¶ 12, 12.1; Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 147:13-16); Axline Decl., Ex. 8 (SUN_PUERTO_ZEEB 019189 [indicating Site Use is "WITHDRAWAL" and Well Status is "In Service"]). Mr. Daus and Mr. Connor identified details of the well in their report, including its depth, based on information from an additional database maintained by the National Water Quality Monitoring Council. Axline Decl., Ex. 7 (Connor-Daus Report (April 2014), Tbl. 5). Mr. Connor conceded San Anton North could be "in a street . . . or underneath a building." Axline Decl. Ex. 7 (Connor Depo., July 3, 2014, p. 350:20-22.)

- 44. San Anton North is an irrigation well located immediately south-southeast of Texaco #800, is 61 feet deep, and likely draws shallow groundwater from the South Coast Aquifer at depths of 41 feet bgs and perhaps shallower at a location that is closer to Texaco #800 than sampling locations B-1 and B-7 at which MTBE from Texaco #800 has been found at 45 and 49 feet bgs, respectively. Garcia Decl., ¶¶ 7-12; Brown Decl., ¶¶ 8, 11, 11.2, 12, 12.1; Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 147:13-16); Axline Decl., Ex. 8 (SUN_PUERTO_ZEEB 019189 [indicating Site Use is "WITHDRAWAL" and Well Status is "In Service"]); Axline Decl., Ex. 7 (Connor-Daus Report (April 2014), Tbl. 5).
- 45. The San Anton North well pumps Class SG (formerly Class SG-1) groundwater. Garcia Decl., ¶¶ 5, 7-12; Brown Decl., ¶¶ 11, 11.1, 11.2.
- 46. Well-bore leakage facilitates and expedites the migration of contaminants from shallow to deeper groundwater, but it is not the sole mechanism for that migration. Brown Decl., ¶¶ 14, 14.1, 14.2. There are no documented aquicludes or aquitards that prohibit the movement of groundwater (and contamination therein) from the shallow aquifer to deeper groundwater, and therefore shallow groundwater is in communication with deeper groundwater in the South Coast Aquifer beneath and in the vicinity of Texaco #800. Garcia Decl., ¶¶ 5, 7-12; Brown Decl., ¶¶ 14, 14.1, 14.2; Axline Decl. Ex. 3 (Brown Report (April 2014), p. 132 ["No distinct aquitard is present between the Site alluvial sediments and the South Coast Aquifer."]).
- 47. MTBE from Texaco #800 is within the capture zone of the San Anton North well. As Mr. Brown testified, Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, pp. 156:7-157:9, 172:2-19, 190:20-191:6).
- 48. Plaintiff's expert Anthony Brown testified that if San Anton North is pumping, "it is more likely than not in the absence of further remedial actions that this well would be impacted by MTBE contamination within five years." Axline Decl. Ex. 11 (Brown Depo., May 23, 2014, pp. 399:14-25, 400:12-18).
- 49. When asked whether MTBE from the Texaco #800 Site could reach the San Anton North well, Mr. Connor conceded that "the concentration at that location could be a detectable concentration." Axline Decl., Ex. 7 (Connor Depo., July 3, 2014, pp. 346:24-347:21).
- 50. Mr. Brown testified that San Anton North is the well most threatened by MTBE from Texaco #800, but that it is not the only well threatened by MTBE from Texaco #800. Axline Decl. Ex. 1 (Brown Depo., May 22, 2014, pp. 190:20-191:25, 192:22-193:13).
- 51. Mr. Brown testified that, if San Anton North is not pumping, "given the scenario or the situation at the site, there will be a capture zone of a well that extends beneath the area of

contamination given the pumping in the area. It's just a matter of which well would that be if the San Anton well was not pumping." Axline Decl., Ex. 1 (Brown Depo., May 22, 2014, p. 193:7-13).

- 52. In the absence of pumping at the Belgica well, groundwater would flow to the next downgradient water supply well(s) (i.e. the Costa Caribe Well). Brown Decl., ¶¶ 16-18.
- 53. In the Brown Report (April 2014), Mr. Brown identified eight public supply wells potentially impacted by the releases from Texaco #800: Three public water supply wells, one domestic water supply well, three irrigation water supply wells, and an industrial supply well. Axline Decl. Ex. 3 (Brown Report (April 2014), p. 111).
- 54. Mr. Brown subsequently identified twenty-six public supply wells potentially impacted by the releases from Texaco #800: Eight public water supply wells (two not in use), four domestic water supply wells, eight irrigation water supply wells, three institutional water supply wells, and three industrial water supply wells. Brown Decl., ¶ 17.

Dated: November 7, 2014

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Respectfully submitted.

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PROOF OF SERVICE VIA LEXISNEXIS FILE & SERVE Commonwealth of Puerto Rico, et al. v. Shell Oil Co., et al., United States District Court, Southern District of New York Case No. No. 07 Civ. 10470 (SAS) I, the undersigned, declare that I am, and was at the time of service of the paper(s) herein referred to, over the age of 18 years and not a party to this action. My business address is 1050 Fulton Avenue, Suite 100, Sacramento, CA 95825-4225. On the date below, I served the following document on all counsel in this action electronically through LexisNexis File & Serve: PLAINTIFF'S CONSOLIDATED RULE 56.1 STATEMENT IN OPPOSITION TO CHEVRON PUERTO RICO, LLC'S, MOTION FOR SUMMARY JUDGMENT RE NO INJURY AT TEXACO # 800 AND PLAINTIFF'S 56.1 STATEMENT IN SUPPORT OF ITS OPPOSITION TO CHEVRON'S MOTION FOR SUMMARY JUDGMENT I declare under penalty of perjury under the laws of the United States of America and the State of California that the foregoing is true and correct. Executed on November 7, 2014, at Sacramento, California.